

AUTHOR: Logacheva, L.N. SOV/115-58-1-4/50

TITLE: The Interferometric Method of Measuring the Angles of Polygons (Interferentsionnyy metod izmereniya uglov mnogogrannikov)

PERIODICAL: Izmeritel'naya Tekhnika, 1958, Nr 1, pp 10 - 12 (USSR)

ABSTRACT: The interferometric method of measuring small angles (up to  $2^{\circ}$ ) with the Kesters interferometer, permits precise measuring of the angles of angular gages (polygons) which are extensively used in industry. The method can be used for calibration of polygons. The error limit of measuring the polygon angles by this method is very small. There are 3 diagrams and 2 non-Soviet references.

1. Gages--Measurement 2. Interferometers--Performance

Card 1/1

LOGACHEVA, L.N.; BYDINOV, V.Ya.

Manufacture and attestation of standard polyhedrons. Trudy VNIIX  
no.4:41-47 '60. (MIRA 13:12)

(Goniometry)

LOGACHEVA, L.N.; PELIKS, M.A., red.; SUKHOV, B.I., red. izd-va; LAKHMAN,  
F.Ye., tekhn. red.

[Interferometry for absolute measurements of gauge blocks]  
Interferometry dlia absoliutnykh izmerenii kontsevykh mer  
dliny. Moskva, Gos. izd-vo standartov, 1961. 35 p. (Seria ob-  
zornykh monografii po izmeritel'noi tekhnike, no.16)

(MIRA 15:4)

(Interferometry)

LOGACHEVA, L.N.; EYDINOV, V.Ya.

Interference method for measuring angles. Trudy inst.Kom.stand.,mer.1  
izm.prib no.47:139-150 '61. (MIRA 15:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Komiteta standartov,  
mer 1 izmeritel'nykh priborov pri Sovete Ministrov SSSR.  
(Interferometry)

LOGACHEVA, L.N.

Unit for internal measurement of through cylindrical holes  
with a diameter from 0,5 to 50 mm. Izv. tekhn. no.2:18-21  
F '65. (MIRA 18:6)



TARVIT-GONTAR', I.A.; LOGACHEVA, L.S.; KICHATOV, E.A.; KIREYEVA, O.V.;  
ROSHKO, N.P.; GOLOBUTO, V.V.; RODIONOV, V.P.

Study of centers of tick-borne spirochetosis, and methods for the  
control of carriers. Sov. zdrav. Kir. no.1:44-46 Ja-F '62.

(MIRA 15:4)

1. Iz Kirgizskogo instituta epidemiologii, mikrobiologii i gigiyeny  
(direktor - kand.med.nauk V.M.Perelygin), Respublikanskoy sanitarno-  
epidemiologicheskoy stantsii (glavnyy vrach - A.A.Mashkevich) i  
Sanitarno-epidemiologicheskogo otryada Leningradskogo rayona  
(glavnyy vrach - P.P.Yagudyayev).

(LENIN DISTRICT (OSH PROVINCE)--SPIROCHETOSIS)

(TICKS AS CARRIERS OF DISEASE)

GOFMAN, Ye.A.; VUL'POVICH, R.D.; LOGACHEVA, V.A.; POLOZOV, A.I.; BERZIN, B.O., kand. tekhn. nauk, inzhener-polkovnik v otstavke, red.; KOZLOVTSEV, V.A., red.; YAKIMOVICH, Yu.K., red.-leksikograf; KUZ'MIN, I.F., tekhn. red.

[German-Russian dictionary of armored force terms] Nemetsko-russkii avtobronetankovyi slovar'. Pod red. B.O.Berzina. Moskva, Voen. izd-vo M-va obor. SSSR, 1961. 487 p. (MIRA 14:8)

(German language--Dictionaries--Russian)  
(Tanks (Military science)--Dictionaries)



I 44807-65 EWT(1)/EWP(n)/EPA(sp)-2/EPF(n)-2/ENG(v)/ENG(m)/EPH/EPA(w)-2/JP(c)  
 Pd-1/Pe-5/Pe-4/Pz-6/Pab-10/Pe-4/Pi-4/Pa-4

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 3, 1965, pp. 448-452

TOPIC TAGS: magnetohydrodynamics, plasma wave, energy, drag, magnetoactive plasma, magnetic sound wave, magnetoacoustic wave

ABSTRACT: The radiated energy spectrum and the radiation drag are calculated for the radiation of magnetoacoustic waves in a magnetized plasma by an oscillating mass current or an acoustic monopole moving at a constant velocity parallel to the external magnetic field. The calculations are based on the linearized magnetohydrodynamic equations and are performed by the method of residues. The "acoustic monopole" is represented as a sinusoidally varying mass source and sink. The calculation is performed only for the case of the normal Doppler effect: when the velocity of the source exceeds the phase velocity of the radiated waves the expressions obtained for the radiated energy and the drag diverge, and in order to achieve convergence it is necessary to take into account dissipative processes of viscosity and

L 44807-65

ACCESSION NR: AP5012042

electroconductivity. The spectral distributions of the radiated energy and the radiation drag are found to differ. Both the radiated energy and the drag increase with increasing source velocity. The integrations over the spectral distributions are performed and closed expressions are obtained for the total power radiated and the total drag for the two limiting cases that the velocity of sound is either much greater or much less than the Alfvén velocity and only the slow magnetoacoustic waves are radiated. "In conclusion, we express our gratitude to E. N. Pershman for valuable discussions of the work." Orig. art has: 36 figs and 2 figures. [02]

Nauchno-issledovatel'skiy radiofizicheskiy institut im. V. L. Ginzburga  
Sverdlovskiy universitet im. V. I. Lenina

LOGACHEVA, V.N. (Novosibirsk)

Biliary peritonitis in acute cholecystopancreatitis without  
perforation of the bile ducts. Khirurgia no.3:110-111 '63.  
(MIRA 15:3)

(GALL BLADDER--DISEASES) (PANCREAS--DISEASES)  
(PERITONITIS)

LOGACHEVA, V.N.

Splenectomy combined with omentonephropexy in the treatment of  
portal hypertension. [with summary in English, p. 150]  
Khirurgiia, no.1:46-48 Ja '57 (MLRA 10:4)

1. Bol'nitsa g. Novosibirska (nauchnyy rukovoditel'-prof.  
V.A. Ivanov)

(HYPERTENSION, PORTAL, surg.  
splenectomy combined with omentonephropexy) (Rus)  
(SPLEEN, surg.  
excis. in portal hypertension, with omentonephropexy)  
(Rus)  
(OMENTUM, surg.  
omentonephropexy in portal hypertension, with  
splenectomy) (Rus)  
(KIDNEYS, surg.  
same)

GRAEETSKIY, A.A.; LOGACHEVA, Yu.P.

Independent work of students during the study of analytical  
chemistry in secondary general schools. Khim. v shkole 18  
no.4:49-58 J1-Ag '63. (MIRA 17:1)

GRABETSKIY, A.A.; LOGACHEVA, Yu.P.

Place of analytical chemistry in secondary general schools  
with work training. Uch.sap.MGPI no.225:5-16 '64.

(MIRA 18:12)

LOGACHEVA, Yu.P.

Development of skills during the study of analytical chemistry  
in secondary general schools. Uch.zap.MGPI no.225:17-23 '64.

Industrial practice of secondary school students in a factory  
laboratory. Ibid.:24-33 (MIRA 18:12)

YUNEVICH, Daniil Petrovich, kandidat tekhnicheskikh nauk; LOGAK,  
I.K., redaktor; ORLOVA, V.P., redaktor; BALLOD, A.I.,  
tekhnicheskiiy redaktor; PAVLOVA, M.M., tekhnicheskiiy redaktor.

[Operation of drainage systems] Eksploatatsiia osushitel'nykh  
sistem. Moskva, Gos.izd-vo selkhoz. lit-ry, 1955. 93 p. (MLR8:12)  
(Drainage)



LOGAK, L.I., inzh.; DUDKO, A.A., inzh.

Crushers with automatic feed regulation. Mekh. stroi. 18  
no.6:23-25 Je '61. (MIRA 14:7)  
(Crushing machinery)

LOGAK, L.I., inzh.

Automatic crushing and screening equipment. Mekh. stroi. 19 no.6:  
21-22 Je '62. (MIRA 17:2)

LOGAK, L.I., inzh.

Investigating an experimental jaw crusher with two movable jaws.  
Trudy VNIISTroidormash 32:10-31 '63. (MIRA 17:6)

LOGAK, L.I., inzh.

Crusher with two movable jaws. Stroi. i dor. mash. 8 no.1:  
25-27 Ja '63. (MIRA 18:5)

LOGAK, L.I., inzh.

New mobile crushing and grading plant for obtaining fine crushed stone.  
Stroi. mat. 9 no.2:13-14 F '63. (MIRA 16:2) -  
(Crushed stone industry—Equipment and supplies)

LOGAK, L.I., inzh.

Improved jaw crusher. Stroi. i dor. mash. 9 no.5:32-34 My '64.

LOAN, H. S.

Metal Cutting

Fine cutting of tempered steels. (Trudy) TSNIITASH no. 44, 1951

9. Monthly List of Russian Accessions, Library of Congress, April 195<sup>2</sup>~~8~~, Uncl.

LOGAK, N.S.

Attachment used for automatic lapping of large-size cylindrical parts.  
Mashinostroitel' no.9:21-22 S '57. (MLRA 10:9)  
(Lathes--Attachments)



BELYANKIN, F.P., otv. red.; BEZUGLYY, V.D., red.; GROZIN, B.D., red.; DRAYGOR, D.A., red.; GURARIY, M.G., red.; LOGAK, N.S., red.; MITSKEVICH, Z.A., red.; PESIN, L.M., red.; RYBICHEVSKIY, Yu.S., red.; CHERNENKO, L.D., red.; YATSENKO, V.F., red.; KUDRYAVTSEV, G., red.; LUPANDIN, I., red.; SHAFETA, S., tekhn. red.

[Use of plastics in the manufacture of machinery and instruments]  
Plastmassy v mashinostroenii i priborostroenii. Kiev, Gos. izd-vo  
tekhn. lit-ry USSR, 1961. 573 p. (MIRA 14:12)  
(Plastics) (Machinery industry) (Instrument manufacture)

L 42799-66  
ACC NR: AR6014357

SOURCE CODE: UR/0277/65/000/011/0018/0018

AUTHORS: Fedorov, V. K.; Shipilov, V. D.; Yukalov, I. N.; Loganov, D. T.

TITLE: Properties of tantalum and niobium

SOURCE: Ref. zh. Mashinostroitel'nyye materialy, konstruksii i raschet detaley mashin. Gidropriyem, Abs. 11.48.155

REF SOURCE: Tr. Vses. n.-i. i konstrukt. in-t khim. mashinost., vyp. 47, 1964, 39-49

TOPIC TAGS: tantalum, niobium, physical chemistry property, corrosion resistance, metal physical property, mechanical property

ABSTRACT: Literature data on the physical and corrosional properties of Ta and Nb and on the utilization of these materials in the chemical industry are discussed. Results from an investigation of Nb and Ta mechanical properties at temperatures from -70 to +300C are presented, as are data on the influence of technical operations (bending, rolling, tube expanding, stamping, and welding) on the corrosional properties on Ta of brand TH3 and on Nb. 3 illustrations, 5 tables. [Translation of abstract]

SUB CODE: 11

UJC: 669.294+669.293

Card 1/1

POLOSHKIN, N.A., inzh.; LOGANOV, M.I., inzh.

Improving the technology of making Kh18N101 stainless steel.  
Stal' 25 no.12:1097-1098 D '65. (MIRA 18:12)

1. Gor'kovskiy metallurgicheskiy zavod.

ANDREYEV, O.B.; LOGASHEV, O.P.

Devices for scientific and laboratory research. Zav.lab.  
31 no.4:516-518 '65. (MIRA 18:12)

BORIN, A.V.; LOGAK, P.I.; TELYAKOVA, V.Sh.; MISHAKOVA, M.V.

Investigating the factors influencing the concentration effect  
in optical sensitization. Zhur.nauch.i prikl.fot.i kin. 7  
no.4:245-251 JI-Ag '62. (MIRA 15:8)

1. Filial Vsesoyuznogo nauchno-issledovatel'skogo kinofoto-  
instituta, Kazan'.

(Photographic emulsions)

BORIN, A.V.; KHANITONOVA, L.V.; KOGAN, P.I.

Studying the nature of the concentration effect in optical sensitization. Zhur.nauch.i prikl.fot. i kin. 6 no.4:297-299 J1-Ag '61. (MIRA 14:11)

1. Filial Vsesoyuznogo nauchno-issledovatel'skogo kinofotoinstituta, Kazan'.

(Photographic sensitometry)

DZYUN', V.K., inzh.; LOGAKIN, S.I., inzh.; VOL'PER, Ye.A.

They write to us. Transp. stroi. 12 no.3:61-62 Mr '62.  
(MIRA 16:11)

1. Glavnyy energetik Rizhskogo remontno-mekhanicheskogo zavoda  
(for Vol'per).

L 05241-67 EWT(d)/EWP(1) IJP(c) GG/BB

ACC NR: AR6020533

SOURCE CODE: UR/0372/66/000/001/G030/G030

AUTHOR: Karn, E.; Konelli, E.; Khalpern, P.; Logan, B.

TITLE: Self-organizing binary logic element 160

38  
B

SOURCE: Ref zh. Kibern, Abs. 1G210

REF SOURCE: Sb. Probl. bioniki. M., Mir, 1965, 429-457

TOPIC TAGS: self organizing system, binary logic, logic element, mathematic logic,  
*learning mechanism*

ABSTRACT: A model of a learning system is presented and the problem of optimizing learning systems with respect to any set of functions is considered. The results of the modeling of the characteristics of a self-organizing binary logic network and certain other networks are analyzed; it is shown that in all the experiments the self-organizing binary logic network has a shorter learning time. 15 illustrations. Bibliography of 5 titles. V. L. [Translation of abstract]

SUB CODE: 09, 05

Card

1/1 *gd*

UDC: 62-506.2:15:62-501.72



LOGAN M. I.

Logan, M. I. "Automatization of the track switches in mine tunnels," Ugol' 1949, No. 3,  
p. 35-36

SO: U-4234. 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 12, 1949).

TITARENKO, M.V., kand. tekhn. nauk, ; LOGANCHUK, L.M., inzh.

Electromagnetic reverse-current relay. Energetik 6 no. 1:23-24 Ja'58.  
(Electric relays)

DROZDOV, A.D., doktor tekhn.nauk; LOGANCHUK. L.M., inzh.

Differential relay without an operating coil for the protection of  
power transformers with multiple windings. Elek.sta. 33 no.1:65-68  
Ja '62. (MIRA 15:3)

(Electric relays)(Electric transformers)

KRUMIN, Zh.K., inzh.; LOGANOV, V.N., inzh.

Automatic control devices used in the manufacture of sewing  
needles. Trudy VNIINMASH no.1:163-176 '59. (MIRA 13:5)  
(Pins and needles) (Automatic control)

LOGANSEN, L.V.

Mössbauer effect and new experiments in corroboration of the general theory of relativity. Fiz. v shkole 22 no.3:13-21 My-Je '62. (MIRA 15:7)  
(Relativity (Physics)) (Mössbauer effect)

LOGANSON, V. YE., FEL'DMAN, YA. I.

Caspian Depression--Climate

Conference on climatological and geophysical research in the Caspian Sea region. Izv. AN SSk. Ser. geog. no. 2:81-85 '52

9. Monthly List of Russian Accessions, Library of Congress, July 195~~2~~<sup>3</sup>, Unclassified.

LOGAR, Anton

LOGAR, Anton dr.

The contact point. Zobozdrav. vest., Ljubljana 9 no.1-2:1-8 1954.  
(TEETH

\*contact point)

LOGAR, Anton, doc. dr.

Relationship between preservative and prosthetic dentistry.  
Zobozdrav. vest., Ljubljana 9 no.4-6:172-177 1954.

(DENTISTRY

preservative & prosthetic dentistry, relationship)



RES, Dusan, dipl. inz.; LOGAR, Franc

Tenth anniversary of the first radio relay link fitted  
with Yugoslav-made apparatus. Elektr vest 30 no. 10/12:  
273-279 '62/'63.

1. Institute of Automation, Research and Development  
Branch 2, Ljubljana, Trzaska 2.

RSC, Dushanbe, Tajikistan; Institute of Automation, Research and Development Center No. 2,  
Ljubljana, Slovenia; 1. 2.

Apparatus for radio relay lines, type RRM 1-10. No. 2. Electric version  
17 no. 1/2:25-31. 14-P. 160.

1. Institute of Automation, Research and Development Center No. 2,  
Ljubljana, Slovenia; 1. 2.

RES, Dusan, dipl. inz. (Ljubljana); LOGAR, Franc (Ljubljana);  
VUGRINEC, Jozе (Ljubljana)

Apparatus for radio relay links, type PIM 1-400. Pt. 1.  
Elektr vest 30 no. 10/12:280-284 '62/'63

LOGAR, I., Dr.

The Society of Physicians in Carniola. Zdrav. vest., Ljubljana  
24 no.1-2:52-53 1955.

(SOCIETIES, MEDICAL, hist.

Society of Physicians in Carniola, Yugosl. (S1))

LOGAR, Ivan  
SURNAME (in caps); Given Names

Country: Yugoslavia

Academic Degrees: Dr.

Affiliation: / not given. /

Source: Ljubljana, Zdravstveni vestnik, No 3-4, 1961, pp 91-92.

Data: "Twenty Years from the Death of Professor Dr. Janez Plecnik."

LOGAR, P.

The SG50/50 service generator of selector pulses. Elektr  
vest 30 no. 8/9:215 '62/'63.

The SM150/7 measurer of telephone pulses. Ibid.:216.

The 800 c.p.s. SG800 service generator. Ibid.:216.

DUBROVA, Georgiy Alekseyevich, prof.; MIKHAYLOV, A.V., retsazent;  
LOGAR'KOV, N.I., nauchnyy red.; LOBANOV, Ye.M., red.izd-va;  
BOBROVA, V.A., tekhn.red.

[Methods for lowering construction costs and reducing the weight of hydraulic engineering structures] Metody oblegcheniya i udeshevleniya gidrotekhnicheskikh sooruzhenii. Moskva, Izd-vo "Rechnoi transport," 1959. 340 p. (MIRA 12:8)  
(Hydraulic engineering)

LOGASHEV, A.N.

Complication during the removal of a ureteral calculus with  
Dormia's snare. Urologia no.1:59-60'63. (MIRA 16:7)

1. Iz urologicheskoy kliniki (zav. - prof. I.M.Epshteyn) I  
Moskovskogo meditsinskogo instituta imeni I.M.Sechenova.  
(CALCULI, URINARY) (URETERS—SURGERY)



LOGASHEV, A.N.

Use of ultrasonic waves in the detection of renal calculi  
during surgery. Urologiia no.6:22-26 N-D '63.

(MIRA 17:9)

1. Iz urologicheskoy kliniki (zav.- prof. I.M. Epshteyn) i  
Moskovskogo ordena Lenina meditsinskogo instituta imeni  
Sechenova i Akusticheskogo instituta (dir.-chlen-korrespondent  
AN SSSR L.M. Brekhovskikh) AN SSSR.

TUKHSENYAYD, O.B.; LOGASHEV, V.G., redaktor; ZUBAREV, G.K., redaktor  
izdatel'stva; YEMEN, N.A., tekhnicheskiy redaktor.

[Servicing sectional-type steerage gear with electric controls of the  
dynamo system] Obsluzhivanie rulevykh privodov sektornogo tipa s  
elektroupravleniem po sisteme generator-dvigatel'. Moskva, Izd-vo  
Ministerstva morskogo i rechnogo flota, 1953. 43 p. (MIRA 7:7)  
(Steering gear)

MELESHKIN, G.A.; LOGASHEV, V.G., redaktor; SUVOROVSKIY, A.P., redaktor;  
FLAUM, M.Ya., tekhnicheskii redaktor.

[Maintenance of electrohydraulic steering machinery] Obsluzhivanie  
elektrogidravlicheskh rulevykh mashin. Moskva, Iz-dvo Ministerst-  
va morskogo i rechnogo flota, 1953. 55 p. (MIRA 7:8)  
(Steering gear)

LOGASHEV, V.G., kand. tekhn. nauk.

Utilizing radioactive radiations in the electric-instrument  
industry. Inform.-tekh. sber. MEF no.8:54-62 '58. (MIRA 12:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektropromyshlennosti.  
(Electric instruments) (Radioactivity)

S/119/60/000/06/09/016  
B014/B014

AUTHOR: Logashev, V. G., Engineer

TITLE: The Main Problems Arising in the Development of Comprehensive Automatic Conveyer Lines in the Construction of Electrical Instruments

PERIODICAL: Priborostroyeniye, 1960, No. 6, pp. 24-27

TEXT: By way of introduction, the author describes the characteristic features of conveyer lines used for assembling, control, and calibration, with special regard to the situation in the Soviet Union. In principle, a maximum output is demanded with a minimum of workers. Furthermore, a sufficient utilization of the individual points of the conveyer line and a reduction of rejects are required. In calculating such conveyer lines it is necessary to take into account fluctuations of the time required for the individual operations. The securing of maximum productivity is discussed. Next, the author describes the calculation of the total error in the calibration of instruments on conveyer lines. In this connection, he discusses the probability that an instrument out of a certain number

Card 1/2

The Main Problems Arising in the Development  
of Comprehensive Automatic Conveyer Lines in  
the Construction of Electrical Instruments

S/119/60/000/06/09/016  
B014/B014

of calibrated instruments meets the demands of a desired <sup>14</sup>quality. The calculation of rejects<sup>14</sup> is illustrated by Table 1, after which the elimination of random errors is dealt with. A conveyer line of the above-described type which is now being built, has been designed at the VNIIEP by Engineer K. P. Shubin for the production of current meters. There are 1 table and 1 Soviet reference. ✓

Card 2/2

89004

13,2900

S/119/61/000/001/008/013  
B019/B067

AUTHOR: Logashev, V. G., Engineer.

TITLE: Error Calculation in Automatic Calibration of Indicators

PERIODICAL: Priborostroyeniye, 1961, No. 1, pp. 19-22

TEXT: The errors occurring in automatic calibration of indicators must be carefully calculated. The author points to the method developed by M. F. Malikov (Refs. 2, 3). The error sources may be divided into two classes: 1) random functional errors and 2) random errors. An analysis showed that the ratio of random error to random functional error is 1 : 2. Thus Malikov's method is suited for both types of errors. New formulas are given, which correspond to the method by Malikov and which take into account the difference between these types of error. The author developed several formulas from which "instrument error" may be determined. It was found that the random functional errors may distort calculated results. A table is given to simplify calculations. There are 3 figures, 1 table and 3 Soviet references.

Card 1/1

MITORFANOV, S.P., doktor tekhn. nauk; LOGASHEV, V.G., kand. tekhn. nauk

Using computers in grouping parts. Mashinostroitel' no.6:4-7 Je '65.  
(MIRA 18:7)



ACC NR: AT6036937

SOURCE CODE: UR/0000/66/000/000/0153/0158

AUTHORS: Guzman, I. Ya.; Pankratova, V. S.; Makarova, T. S.; Vinogradova, L. V.; Logacheva, N. S.

ORG: none

TITLE: The influence of some technological parameters on the manufacture and properties of cellular carborundum light-weight refractories

SOURCE: Nauchno-tehnicheskoye obshchestvo chernoy metallurgii. Moskovskoye pravleniye. Vysokogneupornyye materialy (Highly refractory materials). Moscow, Izd-vo Metallurgiya, 1966, 153-158

TOPIC TAGS: carborundum, silicon carbide, silicon, refractory product

ABSTRACT: A method for obtaining light-weight, cellular carborundum refractories made of  $\beta$ -SiC,  $\text{Si}_2\text{ON}_2$ , and  $\text{SiO}_2$  is described. This investigation supplements the results of I. Ya. Guzman and V. S. Morozova (Ogneupory, 1963, No. 12, 558). The method consists of the adding an intimate mixture of SiC + Si to an aqueous HCl solution and of subsequent firing in carbon-containing media in a CO + N<sub>2</sub> atmosphere. The effects of the silicon composition and grain size of the mixture, pH of suspension, and the firing temperature on the properties of the finished product were investigated. The experimental results are tabulated. It was found that the best results were

Card 1/2

ACC NR: AT6036937

obtained at pH 3--4, a moisture content of suspension of 40%, and an Si content of 40%. The optimum firing temperature was found to be 1300--1400C. On the basis of the above results, a pilot project for the manufacture of refractory bricks has been initiated at the Podolsk Refractories Plant. Orig. art. has: 5 tables.

SUB CODE: 11/

SUBM DATE: 02Nov65/

ORIG REF: 002

Card 2/2

LEONOVICH, I. I.

Raznennye i oblitsovochnye raboty [Stone and facing work]. Moskva,  
Trudreservizdat, 1953. 196 p.

80: Monthly list of Russian Accessions, Vol. 6 No. 11 February 1954

LOGASHKIN, V. A.

AID P - 1143

Subject : USSR/Mining

Card 1/1 Pub. 78 - 21/25

Authors : Rubachev, G. N., Logashkin, V. A. and Davtyan, S. Kh.

Title : Improved working methods and their effectiveness in the  
Buzovnin Drilling Bureau

Periodical : Neft. khoz., v. 32, #11, 83-89, N 1954

Abstract : A method of coordinating drilling operations leading to  
an appreciable increase in speeds of assembly and dis-  
mantling of the drilling pipe line and convenience in  
carrying the pipe sections to the storage pile is out-  
lined. A hydraulic method is described for cementing  
the well.

Institution : TsIMTneft (Central Scientific Research Institute for  
Mechanization and Organization of Labor in the Petroleum  
Industry).

Submitted : No date

KHVOROSTOV, S.; LOGASHKIN, V.

Practice of large-block construction of drilling rigs with a pile  
foundation. Nov.neft.tekh.: Nefteprom.delo no.6:17-23 '54.

(MIRA 14:10)

(Oil well drilling rigs)

KRAVTSEV, D.I. (Kitab); MUKHAMEDZHANOVA, S.D. (Kitab); LOGASHOV, A.G.  
(Kitab)

Mean latitude of Kitab. Astron.tsir. no.224:26-28 Ag '61.  
(MIRA 16:1)  
(Kitab—Latitude)

LOGASHOV, Yc.A.

~~Effect of the time when blood is drawn on the results of an~~  
examination. Lab. delo 4 no. 6:13-16 H-D '58 (MIRA 11:12)  
(BLOOD--EXAMINATION)

OLIMOV, I.A.; Prilozheniye: KADENTSEV, V.I.; BELYI, I.V.;  
LOGASHOVA, E.I.

Effect of the dispersion of raw materials on the properties of  
piezoceramics. Khim. prem. 41 no.2:39-42 + '65. (MIRA 1344)



L 06198-67 EWT(i)/EWT(m)/EWP(w)/EWP(v)/EWP(j) LJP(c) JD/WW/EM/RM  
 ACC NR: AP6032510 (A) SOURCE CODE: UR/0413/66/000/017/0082/0083

INVENTOR: Kolesnikov, L. A.; Logashov, Yu. A.; Makeyev, A. I.

39  
39  
B

ORG: none

TITLE: Device for attaching strain gages. Class 42, No. 185530. [announced by Kharkov Aviation Institute (Kharkovskiy aviatsionnyy institut)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 17, 1966, 82-83

TOPIC TAGS: strain gage, strain, strain gage attachment, ADHESION

ABSTRACT: The proposed device for attaching strain gages to a structure under investigation contains clamps for fastening the strain gages to the structure, an elastic pad, for example of a soft rubber for uniform distribution of glue under the strain gage, and a heating element for fast drying of the glue. In order to provide a continuous clamping force to the structure, the device is equipped with a vacuum suction cup connected to the elastic pad. In an another version of the device, in order to orient the device with the strain gage in relation to the structure being investigated.

Card 1/2

UDC: 620.172

L 06198-6

ACC NR:

AP6032510

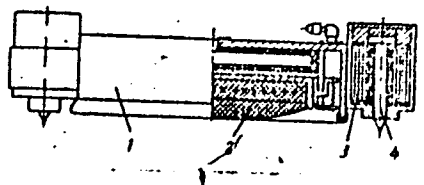


Fig. 1. Attaching device

1 - Vacuum suction cup; 2 - elastic pad;  
3 - magnets; 4 - cores.

it is equipped with electromagnets, whose cores have sharpened ends by which the device is fixed to the structure being investigated prior to the gluing of strain gages. Orig. art. has: 1 figure.

15

SUB CODE: 14 / SUBM DATE: 23Jun65/

Card 2/2 afs

LOGA-SOVIN'SKIY, I. (Loga-Sowinski, I.)

What must trade unions do to strengthen worker democracy, defend the interests of laborers, and build socialism. Vnem.prof.dvizh. no.7:40-44 S '57. (MIRA 10:9)

1. Predsedatel' Tsentral'nogo soveta profsoyuzov Pol'shi.  
(Poland--Trade unions)

LOGA-SOVIN'SKIY, I. [Loga-Sowiński, J.]

The road to unity. Vsem.prof.dvizh. no.11:28-30 M '57.

(MIRA 11:1)

1.Predsedatel' TSentral'nogo soveta profsoyuzov Pol'shi, vitse-  
predsedatel' Vsemirnoy federatsii profsoyuzov.  
(Trade unions)

VARNKE, Gerbert [Warnke, Herbert] (Germanskaya Demokraticeskaya Respublika);  
LOG-SOVINSKIY, I. [Log-Sovinski, J.]; ZIPKA, Frantishek [Zupka,  
Franticek].

For the creation of an atom-free zone in Central Europe. Vsem. prof.  
dvizh. no.4:2-4 Ap '58. (MIRA 11:5)

1. Predsedatel' ob'yedineniya svobodnykh nemetskikh profsoyuzov (for  
Varnke). 2. Predsedatel' Tsentral'nogo soveta profsoyuzov Pol'shi  
(for Log-Sovinskiy). 3. Predsedatel' Tsentral'nogo soveta profsoyuzov  
Chekhoslovakii (for Zupka).

(World politics)

LOGA-SOVIN'SKIY, I. [Loga-Sovinski, J.]

Results of the fourth congress of Polish trade unions. Vsem.  
prof. dvizh. no. 6:13-16 Ja '58. (MIRA 11:7)

1. Predsedatel' Tsentral'nogo soveta profsoyuzov Pol'shi.  
(Poland--Trade unions--Congresses)

LOGA-SOVINSKIY, I. [Loga-Sowinski, I.]

Important role of Polish trade unions in the struggle of the World Federation of Trade Unions for united action. Vsem. prof. dvizh. no.12:3-6 D '60. (MIRA 13:12)

1. President of the Central Council of Polish Trade Unions, Vice-President of the World Federation of Trade Unions.  
(Poland-Foreign relations--Germany, West)

LOGA-SOVIN'SKIY, I.

Solidarity is our invincible weapon. Sov. profsoiuzy 17 no.23:  
12 D '61. (MIRA 14:12)

1. Predsedatel' Tsentral'nogo soveta profsoyuzov Pol'shi.  
(Poland--Trade unions)  
(Poland--Economic policy)  
(Trade unions--Congresses)



LOGA-SOWINSKI, Ignacy

The role of the Trade Unions in the development of technological progress;  
from an address of Ignacy Loga-Sowinski, President of the Central Council  
of the Trade Unions. Przegl techn no.50:4 16 D '62.

1. Przewodniczący Centralnej Rady Związków Zawodowych, Warszawa.

LOGA-SOVIN'SKIY, I. [Loga-Sowinski, I.]

On the eve of the Fifth Congress of Polish Trade Unions.  
Vsem. prof. dvizh. no.10:27-31 0 '62. (MIRA 15:11)

1. Predsedatel' Tsentral'nogo soveta professional'nykh  
soyuzov Pol'shi.

(Poland—Trade unions)

(Poland—Labor and laboring classes)

LOGA-SOWINSKI, Ignacy

We understand the need of strengthening the position and authority of the Chief Technical Organization. Przegl techn 84, no.25:1,4 23 Je '63.

1. Przewodniczący Centralnej Rady Związków Zawodowych, Warszawa.

LOGATKIN, M.N.; KISEL', V.P.; RAMZAYEV, P.V.

One-stage method of determining average skin temperature. Gig. & san.  
23 no.3:83-85 Mr '58. (MIRA 11:4)

1. Iz Voenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova.  
(BODY TEMPERATURE, determ.  
one-stage method of determ. of skin temperature)  
(SKIN, physiol.  
temperature determ., one-stage method)

LOGATKIN, M.N.

Some characteristics of the utilization of endogenous fat during partial starvation and physical stress. Vop. pit. 22 no.5:27-34 S-O '63. (MIRA 17:1)

1. Iz kafedry obshchey i voyennoy gigiyeny (nachal'nik - prof. P.Ye. Kalmykov) Voenno-meditsinskoy ordena Lenina akademii imeni Kirova.

MORDASOV, P.M., kand.veterin.nauk; BITYUKOV, P.A., kand.veterin.nauk;  
PINCHUK, M.I.; MALINOVSKIY, I.F.; LOGEYEV, A.M.

Mass prophylaxis of babesiasis in cattle by means of early  
(preventive) chemotherapy. Trudy NIVI 1:100-104 '60.  
(MIRA 15:10)  
(Chemotherapy) (Piroplasmosis)(Cattle—Diseases and pests)

GOMONOVA, A.I.; LOGGINOV, A.S.; SENATOROV, K.Ya.

Determining the lifetime of current carriers in the wide base of a  
four-layer semiconductor triode. Vest. Mosk. un. Ser. 3: Fiz., astron.  
18 no.6:43-47 N-D '63. (MIRA 17:2)

1. Kafedra teorii kolebaniy Moskovskogo universiteta.

L 04162-65 EAT(1)/EEC(k)-2/ENG(m)/T/EEC(b)-2/ENG(h) Pt-L/Pt-6/Pet LIP(c)

ACCESSION NR: AP5005148

S/0188/65/000/001/0047/0054

AUTHOR: Gomonova, A. I.; Logginov, A. S.; Senatorov, K. Ya.

TITLE: Investigation of transients in a three-junction semiconductor diode in response to a large signal

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fizika, astronomiya, no. 1, 1965, 47-54

TOPIC TAGS: three junction diode, transient response, minority carrier, base resistance, emitter junction, carrier lifetime

ABSTRACT: The response of a three-junction (p-n-p-n) semiconductor diode to a step-current input was investigated both theoretically and experimentally. The theoretical investigation of the switching process in such a device consisted of determining the distribution of the minority carrier concentration and the configuration of the electric fields in the base of the three-junction diode during the time of the current pulse. From a determination of the carrier concentration and the electric fields, the authors were able to calculate the time variation of the voltages on the p-n junctions, and thus determine the transient characteristics of the base-emitter junction.



01/2-65

ACCESSION NR: AP5005148

distance and the variation of the voltage on the emitter p-n junction to the total transient on the three-junction diode. The theoretical calculation has shown that the voltage transient in a three-junction diode is determined by the carrier lifetime in the base region. It is shown that the carrier lifetime is determined by the current, that the diode is one-dimensional with respect to current flow, that the carrier lifetime of the minority carriers is constant. The accuracy of the calculation is large. The base region is shown to be the most important region in the diode. The results are illustrated by graphs and formulas. The results are in good agreement with the experimental data. The original article has 7 figures and 10 formulas.

ABSTRACT: Kafedra fizike poluprovodnika, Masinski i Elektrotehnicki Fakultet, Univerzitet u Zagrebu, Zagreb, Republika Hrvatska. Original article in Russian. 1965.

Author: [illegible]

Title: [illegible]

Page 2/2

ACC NR: AP6030976

SOURCE CODE: UR/0181/66/008/009/2768/2769

AUTHOR: Knab, O. D.; Magalyas, V. I.; Logginov, A. S.; Astaf'yev, A. S.

50

ORG: none

13

TITLE: Effect of surface on the characteristics of injection semiconductor quantum generators

SOURCE: Fizika tverdogo tela, v. 8, no. 9, 1966, 2768-2769

TOPIC TAGS: pn junction, quantum generator, surface property

ABSTRACT: One of the major parameters determining the generation of radiation in semiconductor sources of coherent radiation with p-n junctions is temperature. In this connection, the study of heat sources existing in quantum generators is of interest. It is shown that the state of the diode surface (lateral faces and faces of the resonator) substantially affects the output parameters of a quantum generator. Indeed, if the surface recombination is nonradiative in character, an additional heating of the p-n junction is possible. It is known that the rate of surface recombination changes over wide limits with different modes of surface treatment of a semiconductor material. The change in the surface recombination rate as a result of the treatment causes a change in the volt-ampere characteristic of the diode. Etching of the lateral surfaces of a GaAs diode led to a decrease in the reverse current and to a shift of the straight branch of the volt-ampere characteristic toward higher voltages. Etching of

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ACC NR: AP6030976

the lateral faces of the diode caused a simultaneous decrease in the temperature of the p-n junction. The state of the surface substantially affects the condition of light generation in the p-n junction, and treatment of the diode surface causes a marked change in the course of the watt-ampere characteristic. It is concluded that a semiconductor quantum generator in the working state can be divided into two regions - the active, luminous region of the p-n junction surrounded on the side of all lateral faces by a passive thermal envelope. This condition must be taken into account in solving problems involving the heating up of p-n junctions. Orig. art. has: 2 figures.

SUB CODE: 20<sup>09/</sup> SUBM DATE: 23Dec65/ OTH REF: 001

Card 2/2 *egh*

ACC. NR: AP6021951

(A)

SOURCE CODE: UR/0188/66/000/002/0118/0120

AUTHOR: Logginov, A. S.; Kurylev, V. V.; Shveykin, V. I.

ORG: Department of Oscillation Physics (Kafedra fiziki kolebaniy)

TITLE: Nonstationary thermal processes in gallium arsenide semiconductor lasers

SOURCE: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 2, 1966, 118-120

TOPIC TAGS: gallium arsenide, semiconductor laser, thermal process, pn junction, thermal conduction

ABSTRACT: Inasmuch as the temperature of the p-n junction in a solid-state laser is an important factor determining laser operation, the authors propose a new method of determining the p-n junction temperature, based on the dependence of the threshold current on the temperature ( $I_{thr} = kT^3$ ). The method makes it possible to measure the junction temperature in the coherent and spontaneous emission modes. It consists of passing a pair of pulses through the laser diode, spaced sufficiently long to permit thermal relaxation of the diode. The second pulse is of short duration and adjustable amplitude. By varying the amplitude of the second pulse it is possible to find the generation threshold for it and to determine the pn junction temperature. By varying the delay time between the working pulse and the measuring pulse, it is possible to

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UDC: 621.378.325

ACC NR: AP6021951

determine the cooling time of the laser diode and plot the cooling as a function of the time. Test results are presented for GaAs n-type diodes (carrier density  $2 \times 10^{18} \text{ cm}^{-3}$ ) of two different constructions. A theoretical analysis of the junction heating under certain assumptions, based on solution of the inhomogeneous one-dimensional thermal conductivity equation under suitable boundary conditions in a linear approximation, yielded an analytic expression for the p-n junction temperature as a function of the duration of the working pulse for a definite pulse amplitude. The expression is in fair agreement with the experimental results. The authors thank K. Ya. Senatorov for valuable remarks and help with the work, and V. P. Durayev for preparing the diodes. Orig. art. has: 3 figures and 2 formulas.

SUB CODE: 20/ SUBM DATE: 21Oct65/ ORIG REF: 000/ OTH REF: 005

Card 2/2

ACC NR: AP7003319

AUTHOR: Logginov, A. B.; Senatorov, K. Ya.; Knab, O. D.; Kurylev, V. V.; Magalyas, V. I.

SOURCE CODE: UR/0188/66/000/006/0110/0110

ORG: none

TITLE: Investigation of emission spectra of semiconductor lasers

SOURCE: Moscow, Universitet, Vestnik. Seriya III. Fizika, astronomiya, no. 6, 1966, 110

TOPIC TAGS: semiconductor laser, laser emission, laser radiation spectrum, emission spectrum, PN TRANSITION

ABSTRACT: An experimental investigation was made of the relation between the spectral characteristics of the emission of semiconductor injection lasers and the spatial distribution of the luminescence along the p-n transition (near field). It is shown that the observed complex composition of the emission spectra of semiconductor lasers, which does not conform to the rule for the selection of modes in Fabry-Perot resonators, is due to the independent generation of separate groups of modes in spectral channels of the p-n transition. The emission of separate groups of modes in spectra and the emission of the luminous regions of the p-n transition are generally polarized linearly in the p-n transition plane or perpendicularly to it. When the number of luminous channels is increased and a growth in their emission intensity occurs when the current between them is increased, an optical interaction occurs. However, the

UDC: none

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ACC NR: AP7003319

interaction between channels occurs not only because of the optical relation but also because of the redistribution of current between channels when the temperature conditions of generation are changed. The redistribution of current is caused by the change in the carrier lifetime during excitation or disruption of generation in separate p-n transition regions. The heating of the laser diode p-n transition, when pumping current exceeds threshold current by several times, has a local character and is due basically to the absorption of emission near the generating channel and is not a result of the Joule losses in the semiconducting material and in the contacts of the laser diode.

[WA-14]

[JA]

SUB CODE: 20/ SUBM DATE: none/

Card 2/2

LOGGINOV, B.I.

25116. LOGGINOV, B.I. Pol' Mariupol'skoy (Veliko-Anadol'skoy) Opytnoy Stantsii  
V Razvitii Arrolesso Melioratsii-V Ogli V.I. Loginov. Trudy Yubileynoy Sessii  
Posvyash Stoletiyu So Dnya Rozhdeniya Dokuchayeva. M.-L., 1949, S. 414-417

SO: Letopis' No. 33, 1949



ЛОСІНОВ, Н. І.

Afforestation - Ukraine

Protective afforestation of irrigated lands in the region of the South Ukraine Canal. Les. khoz. 5, no. 4 (43), 1952.

2

9. Monthly List of Russian Accessions, Library of Congress, August 1953, Uncl.

14-57-7-15076

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 7,  
pp 144-145 (USSR)

AUTHOR: Log<sup>G</sup>ginov, B. I.

TITLE: Division of the Ukrainian SSR Into Agricultural and  
Silvicultural Reclamation Districts (Agroleso-  
meliorativnoye rayonirovaniye Ukrainskoy SSR)

PERIODICAL: Nauch. tr. Ukr. n.-i. in-t les. kh-va i agroleso-  
melior. 1956, Nr 18, pp 306-319

ABSTRACT: Approximately 40 million hectares of the Ukrainian  
SSR are covered by forests which protect the fields.  
The variety of natural conditions in the forest-  
steppe and the steppe zones has caused this territory  
to be divided into 16 forest reclamation districts.  
The climate, soils, hydrology, and geomorphology of  
the area were considered in delineating these  
districts. The forests in each district are briefly

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1.-57-7-15076

Division of the Ukrainian SSR (Cont.)

described, and a list is included enumerating those trees and shrubs which should be established in the field-protecting forest belts in each silvicultural and agricultural reclamation district. The work also includes a map showing reclamation districts of the Ukrainian SSR, tables of the trees and shrubs which should be planted, and a description of the climate prevailing in the reclamation districts.

N. Ya. T.

Card 2/2

4-22-111-2V, B. 1.

COUNTRY : USSR  
 CATEGORY : Forestry. Forest Cultures. K

ABST. JOUR. : RZhBiol., No. 3, 1959, No. 10795

AUTHOR : Lagginov, B. I.  
 INST. : Ukrainian Academy of Agricultural Sciences.  
 TITLE : On the Growth of Common Pine in Cluster Cultivation.

CONF. PUB. : Dopolvid Ukr. akad. sil'skogospod. nauk, 1958, No. 2, 51-55

ABSTRACT : It was found through the studies of the cluster sowings and plantings started in 1949 at Boyarskiy Training and Experimental Leskhoz, that the young trees in the center of the cluster grow better only during the first years while decreasing later the increment and yielding in growth to the outermost specimens which are the ones that subsequently form the tree stand. When the cultures were started on treeless areas, the trees in such stands have been characterized by defective development and are infe-

CARD: 1/2

LOGENOV, Boris Iosifovich

"Principles Of Field - Protecting Afforestation In The USSR."

report to be submitted for the Fifth World Forestry Congress, Seattle, Washington,  
29-10 Sep 60

Chairman, Section of Forestry Hydrotechnics and Melioration, Ukrainian Academy of  
Agricultural Sciences, Kiev.

LOGGINOV, Boris Iosifovich; NOVIKOV , A.L., prof., red.; BLANINA, L.F.,  
red.; VIDONYAK, A.P., tekhn. red.

[Fundamentals of shelterbelt afforestation] Osnovy polezashchit-  
nogo lesorazvedeniia. Kiev, Izd-vo Ukrainskoi akad. sel'khoz.  
nauk, 1961. 349 p. (MIRA 15:3)  
(Windbreaks, shelterbelts, etc.)

SKORODUMOV, Aleksandr Sergeyevich, kand. sel'khoz. nauk; PASTUSHENKO, Vasilii Omufriyevich, kand. sel'khoz. nauk; DUNAYEVSKIY, Vasilii Nikodimovich [Dunaievs'kyi, V.H.], starshiy nauchnyy sotr.; LOGGINOV, B.Y. [Lohhinov, B.I.], prof., doktor sel'khoz. nauk, red.; BLANINA, L.F., red.; KVITKA, S.P., tekhn. red.

[Soil erosion and its control] Eroziia hruntiv i borot'ba z neiu. Kyiv, Vyd-vo Ukrain's'koi akad. sil'skohospodars'kykh nauk, 1961. 235 p. (MIRA 15:2)

1. Chlen-korrespondent Ukrain'skoy akademii sel'skokhozyaystvennykh nauk (for Logginov).

(Ukraine--Erosion control)

LOGINOV, B.V.

Determining the exactness of the perturbation method. Izv.  
AN Uz. SSR. Ser.fiz.-mat.nauk 7 no. 6:14-20 '63.  
(MIRA 17:6)

1. Tashkentskiy gosudarstvennyy universitet imeni Lenina.



MINACHEV, Kh.M.; LOGINOV, G.A.

Conversions of alkyl cyclopentenes and allylcyclopentane on erbium  
oxide. Neftekhimiia 3 no.2:181-187 Mr-Apr '63. (MIRA 16:5)

1. Institut organicheskoy khimii AN SSSR imeni N.D.Zelinskogo.  
(Cyclopentene) (Cyclopentane) (Erbium oxide)

| 1ST AND 2ND PARTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | PROCESSING AND PROPERTIES INDEX |  | 125 AND 126 (1953) |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------|--|--------------------|--|
| <p><i>Ch</i></p> <p>Influence of medium and of adsorbing substances on the mechanical properties of mica. I. O. I. Lousinov, <i>J. Tech. Phys. (U. S. S. R.)</i> 8, 1857-71 (1938).—The force necessary to split a plate of mica thinner than 0.025 cm. is proportional to the width and the thickness of the plate. The force necessary to pierce a mica plate thinner than 0.008 cm. is proportional to its thickness. In addition to these forces the tensile strength and the hardness as given by a pendulum microhardness were detd. All these quantities were almost unaffected by wetting the plate with <math>\text{PbMe}_2</math> or with solns. of stearic acid or amides in <math>\text{PbMe}_2</math>. They were lowered by wetting it with <math>\text{H}_2\text{O}</math> or aq. solns. of <math>\text{NaOH}</math>. iso-AmOH was more active than iso-BuOH; and sucrose more than glucose. <math>\text{PhNH}_2</math> and <math>\text{NaOH}</math> salts were also employed. Scratching of mica gave no reproducible results. J. J. Bikerman</p> |  | 2                               |  |                    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                 |  |                    |  |
| <p>ASS-51A METALLURGICAL LITERATURE CLASSIFICATION</p> <p>GROUPS: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                 |  |                    |  |

BC

PROCESSING AND PROPERTY INDEX

Changes in the elastic properties of mica caused by penetration of liquid into the strained crystal. P. Rehbinder and G. Logginov (Compt. rend. Acad. Sci. U.R.S.S., 1941, 80, 481—483).—Decrease of strength of a solid placed in a liquid is due to the active liquid (usually the solution of the substance) penetrating inside the crystal into the predestruction zone, i.e., the zone where a gradual formation of micro-cracks precedes fracture. Experiments have been made with mica to investigate the influence of the medium and of adsorbed substances on the elastic deformation of a crystal, and to find out whether the predestruction zone could form in the elastic region. Young's modulus and the strength of the mica in  $H_2O$  decrease when  $iso-C_8H_{17}OH$  is added to the  $H_2O$ . The strength of the mica decreases inversely as the concn. of the surface-active substance in the solution, but the elastic deformation with const. stress increases with adsorption according to Langmuir's isotherm. Fully elastic deformations increase considerably (80—90%) under the same additional stresses when  $H_2O$  is substituted for aq. solutions of surface-active substances. This has been proved for pure adsorption of saturated alcohols which do not react with the mica; the effect increases regularly on passing up a series of homologues. It has also been proved for exchange adsorption brought about by  $NaOH$ . Even though the second case probably involves chemical reaction, the deformation disappeared when the additional stresses were removed. The greatest deformation is in an active liquid is reached gradually, from which it may be inferred that the liquid penetrates into the crystal through the micro-cracks of the predestruction zone.

A. J. M.

Voronezh State U.  
Voronezh Med Inst.

Inst. Colloid + Electrochem, A.S. +

ASD-51A METALLURGICAL LITERATURE CLASSIFICATION

STONY SIMONSON

STONY SIMONSON

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STONY SIMONSON

Resistance of crystals of gypsum and mica against periodic torsion. D. P. ONILOV AND G. I. LARGISOV. *Doklady Akad. Nauk S.S.S.R.*, 70 (2) 249-51 (1959).—Samples were prepared in the form of rectangular plates with the torsion axis lying in the plane of complete cleavage always along the same crystallographic direction. For gypsum plates of 0.8 to 2 mm, resistance dropped sharply with increasing thickness from  $5.3 \times 10^3$  to  $1.0 \times 10^4$  cycles in water and from  $3.0 \times 10^3$  to  $0.6 \times 10^4$  cycles in 0.2% aqueous solution of  $\text{CaCl}_2$ . The maximum angle of torsion ( $\varphi$ ) was 25 min/cm and a frequency of 250 oscillations/min. For mica plates of 0.05 to 0.4 mm, resistance increased from 1000 to 4000 cycles in water for same frequency but for maximum  $\varphi = 0.5$  min/cm and from 350 to 1050 cycles in saturated (2.7%) aqueous solution of isosanyl alcohol. The differences in behavior are explained by the nature of the destruction of gypsum and mica.

R. Z. K.

AND S. L. A. METALLURGICAL LITERATURE CLASSIFICATION